

***Rural
Telecommunications***

***Montana Senate
Energy & Telecommunications
Committee***

April 12, 2005

Montana Independent Telecommunications Systems
www.mitsel.com



- MITS and MITS Telco Companies
- Realities of Montana's Telecom Markets.
- Strategies for Success.
- Challenges Ahead



MITS

*Providing professional services to the
telecommunications industry since
1994.*

- The Voice of our member companies
 - Rural Independent Telco's

Services

- Lobbying Public Relations
- Policy Expertise Rural Advocacy



Facts About the Montana

Market:

- 4th in land area (145,552 square miles).
- Ranks 44th in population (Just Over 900,000).
- Rugged and diverse geography



Montana

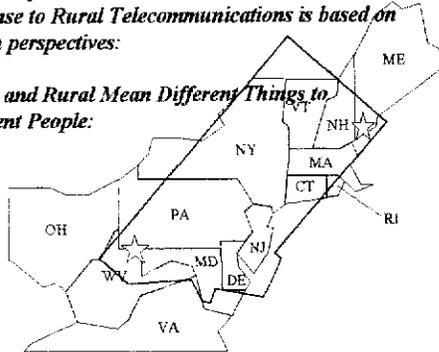


Definitely not in Montana



Realities of Federal Telecom Policy: The FCC's Response to Rural Telecommunications is based on its own perspectives:

Urban and Rural Mean Different Things to Different People:



★ Eureka, MT to Ekelake = Chicago to Washington, D.C.



Much of MT's Population Lives in 6 "urban" areas - Served by Montana's only nonrural teleco: Qwest

The remaining, most rural areas of the state are served by Montana's independent and cooperative telecom carriers.

Serving over 31% of Montanans Spread across roughly 80% of Montana's land mass.

Serve fewer than 3 access lines/mile on average.

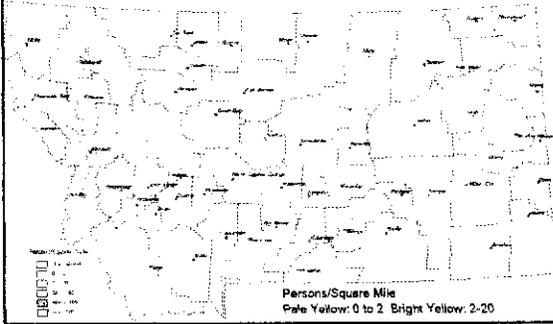


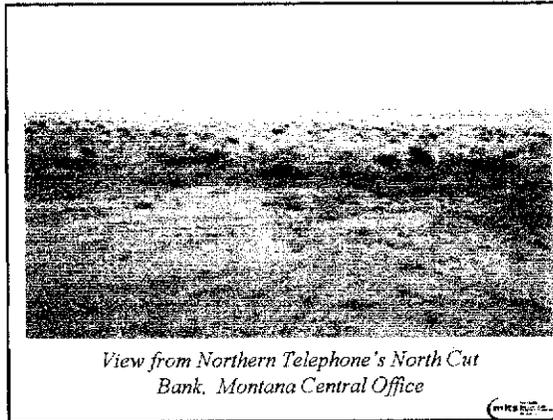
Nemont Telephone crew near Ft. Peck



Triangle Telephone crew laying fiber

3 D's drive T-Com Costs:
Distance-Density-Demand





*View from Northern Telephone's North Cut
Bank, Montana Central Office*





*View from Southern Telephone's Central Office
Wisdom, Montana*

- Serve rural, remote and rugged areas, generally bypassed by the large regional telcos.
- Stepped up to the plate 50 years ago
- Evolving service offerings in step with realities of modern markets



- Networks that are scalable
- Committed to providing access to advanced services
- Partners in rural economic development
- Owned and operated by Montanans
- Montana earnings = Montana Investments

MT's rural telcos deployed the first fiber in the state, first digital switches, first E911 system, first ATM network, first DSL services...



Strategies for Success?

- Make every dollar count:
 - Build robust, scalable infrastructure.
- Recognize role in communities:
 - Education.
 - Economic development.
 - Public safety.
- Partnerships and collaborations with other telcos:
 - Share strengths and expertise.
 - Share costs.
 - Share risks.
 - Aggregate demand -- achieve economies of scope and scale.
- Innovate, Innovate, Innovate.

Giertana, MT Served by Nemont Telephone



Results?

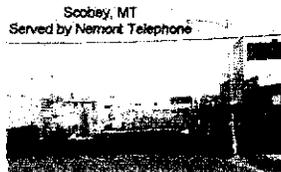
- Service quality is Real
- High expectations - Demonstrated commitment
- Basic service
- Class services
 - Caller ID, Conferencing, etc.
- Internet - from dial-up to high speed advanced

- Wireline and Wireless
 - Sagebrush Cellular
 - Triangle Communications
- Exploring new technologies
 - Fiber to the home
 - Voice over Internet
 - Triple Play - Voice, data, video



Some MT Success Stories:

- DSL Deployment.
- iConnect Montana.
- MAIN, Inc.
- Vision Net



DSL Deployment

- DSL (Digital Subscriber Line) is the technology that turns ordinary copper voice lines into high-speed Internet lines.
- MT's rural telcos have deployed the service in over 150 communities.
 - Many MT's rural communities enjoyed DSL long before MT's larger cities.
- Challenge - Subscribership.
 - Usage is growing slowly, but we believe that new Internet applications will drive demand over the next few years.
 - VOIP, video over copper, information/entertainment content.



iConnect Montana
Providing neutral collocation in a secure, robust central office environment with access to multiple backbone networks.

iConnect - Bozeman
 iConnect - Missoula
 iConnect - Great Falls
 iConnect - Helena
 iConnect - Billings

What the heck is a fiber hotel anyway?

Booking a room at the intersection of some very busy highways

Companies have access to multiple fiber and wireless networks simply by cross connecting equipment from rack to rack or cage to cage in a safe, controlled, neutral environment.

iConnect Fills a Niche in Montana's Economy

- Allows even "small" players to take advantage of economies of scale and scope that were previously available only to large companies
 - Shared costs of building and maintaining suitable equipment rooms
 - Access to network backbones
 - Bandwidth aggregation and peering opportunities

iConnect's Fiber Hotels:

- Provide conditioned "telco grade," carrier-ready space for rent.
 - Controlled temperatures
 - Conditioned power supply (constant voltage levels) w/backup batteries and generators (un-interruptible power)
 - Specialized fire detection/suppression.
 - Highly secure areas, but 24/7 access for tenants.
 - Connectivity to multiple networks.

- Tenants include CLECs, ILECs, ISPs, e-commerce providers, ASPs, enterprise customers, etc.



MAIN

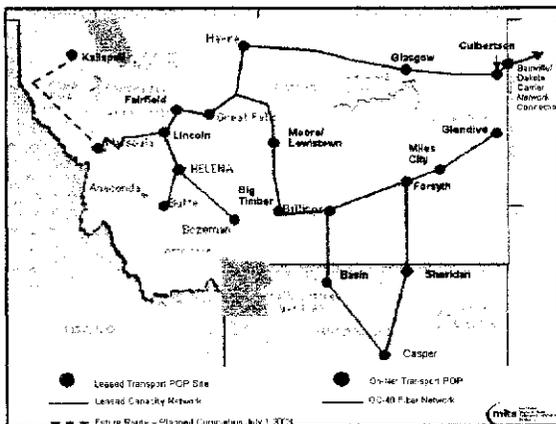
Montana's Advanced Information Network

- Consortium of 9 Rural MT Telcos
 - Connecting fiber networks
 - Sharing costs of lightwave equipment, network admin, etc.

- Transport Network (Big Pipes)
 - SONET technology
 - Equivalent capacity of 32,256 channels or 48 DS-3s/

- Intrastate and Interstate Circuits







- Established in 1995; Consortium of 5 MT telephone cooperatives (Nemont, Triangle, Northern, 3 Rivers and Blackfoot).
- Created to provide advanced services to rural Montana.
- Assists schools in certifications class options
- > over 130 current sites:
 - K-12 Schools Colleges Hospitals Telcos
 - Commercial Studios District Courts
 - Private Studios – Albertsons, First Interstate Banks, Law Firms, etc.

**Video Conference
Connectivity
Serving Public & Private Entities**



Traditional video over ATM – full motion interactive
1288 kbps (H.320 and H.323)

Desktop video conferencing

ISDN based videoconferencing

Bridges to other (public and private) networks around the world.

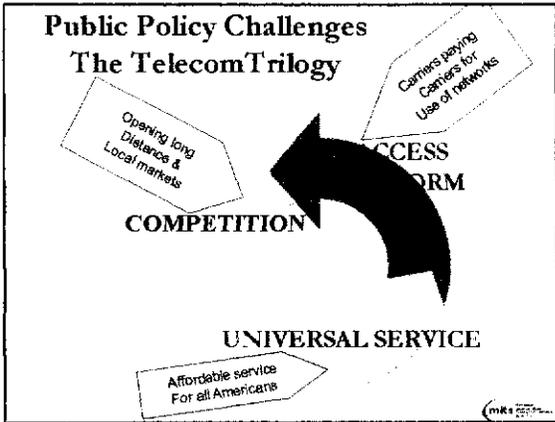


Senator Baucus, meeting with students from Bainville, MT

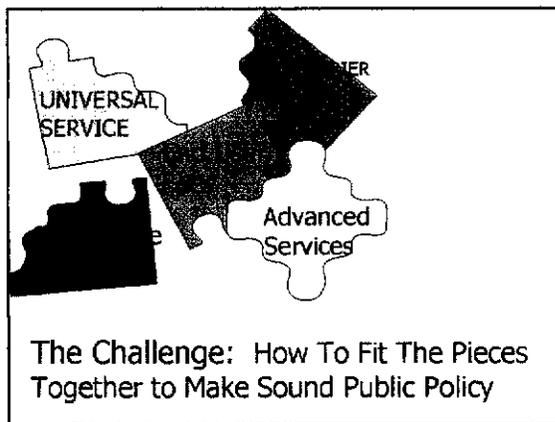


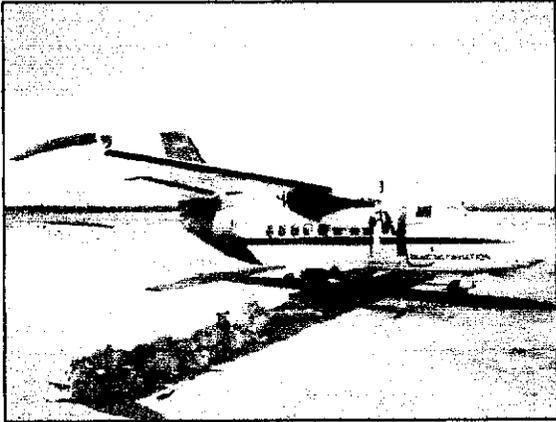
Vision Net provides 60+ hours of all types of video conferencing, linking Montanans to others around the world, every day.





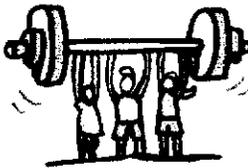
- Public Policy Challenges*
- Revenue Flows
 - Subscriber Revenue
 - Universal Service
 - Intercarrier Access
 - Federal Universal Service Pressures
 - Explosion of competitive carriers
 - \$2.25 billion annually in E-Rate program
 - Re-allocation of cost recovery to Universal Service Fund
 - Intercarrier Access Charge Pressures
 - Who uses the networks?
 - Who pays for using the networks?
 - Technology neutral?
- mitelink





Suggestion for Success:

TEAMWORK



MIT S

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